

Title (en)
CHARGE CONTROL FOR IONIC CHARGE ACCUMULATION DEVICES

Title (de)
LADUNGSSTEUERUNG FÜR IONISCHE LADUNGSAKKUMULATIONSEINRICHTUNGEN

Title (fr)
CONTRÔLE DE CHARGES POUR DISPOSITIFS D'ACCUMULATION DE CHARGES IONIQUES

Publication
EP 2235737 A4 20151216 (EN)

Application
EP 08861255 A 20081204

Priority
• US 2008085576 W 20081204
• US 413607 A 20071219

Abstract (en)
[origin: US2009159791A1] A method for controlling charge flux into a charge accumulation device includes determining a charge accumulation time during which charges are to be accumulated in the charge accumulation device, measuring a charge flux of a first ion beam produced from an ion source, determining a target number of charges to be accumulated in the charge accumulation device during the charge accumulation time based on the measured charge flux and, based on the determined target number of charges, modulating a second ion beam produced from the ion source to cause the target number of charges from the second ion beam to be accumulated in the charge accumulation device during the charge accumulation time. An ion processing device is configured for controlling the charge flux. An ion beam modulator modulates the ion beam.

IPC 8 full level
H01J 49/42 (2006.01); **G01N 27/62** (2006.01); **H01J 49/00** (2006.01); **H01J 49/06** (2006.01)

CPC (source: EP US)
H01J 49/0031 (2013.01 - EP US); **H01J 49/067** (2013.01 - EP US); **H01J 49/4265** (2013.01 - EP US)

Citation (search report)
• [YA] US 2007284521 A1 20071213 - GREEN MARTIN [GB], et al
• [A] US 5479012 A 19951226 - WELLS GREGORY J [US]
• [A] US 6633114 B1 20031014 - HOUK ROBERT S [US], et al
• [XY] PAGE J S ET AL: "Automatic gain control in mass spectrometry using a jet disrupter electrode in an electrodynamic ion funnel", JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, ELSEVIER SCIENCE INC, US, vol. 16, no. 2, 1 February 2005 (2005-02-01), pages 244 - 253, XP027790475, ISSN: 1044-0305, [retrieved on 20050201]
• See references of WO 2009079222A2

Designated contracting state (EPC)
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DOCDB simple family (publication)
US 2009159791 A1 20090625; US 7629575 B2 20091208; DE 08861255 T1 20110317; EP 2235737 A2 20101006; EP 2235737 A4 20151216; JP 2011508381 A 20110310; JP 5426571 B2 20140226; WO 2009079222 A2 20090625; WO 2009079222 A3 20090924

DOCDB simple family (application)
US 413607 A 20071219; DE 08861255 T 20081204; EP 08861255 A 20081204; JP 2010539608 A 20081204; US 2008085576 W 20081204